DOCUMENT RESUME

ED 473 959 CS 511 878

| | |
|---|---|
| AUTHOR | Healy, Annah; Dooley, Karen |
| TITLE | Digital Reading Pedagogy for Novice Readers. |
| PUB DATE | 2002-12-00 |
| NOTE | 15p.; Paper presented at the Annual Meeting of the Australian Association for Research in Education (Brisbane, Australia, December 1-5, 2002). |
| AVAILABLE FROM | For full text: http://www.aare.edu.au/02pap/doo02126.htm. |
| PUB TYPE | Reports - Research (143) -- Speeches/Meeting Papers (150) |
| EDRS PRICE | EDRS Price MF01/PC01 Plus Postage. |
| DESCRIPTORS | *Beginning Reading; Early Childhood Education; *Educational Practices; *Foreign Countries; *Literacy |
| IDENTIFIERS | Australia (Queensland); Teaching Research |

ABSTRACT

This paper reports on a study of pedagogic practices surrounding novice readers of digital texts in four early childhood classrooms in Queensland, Australia. An empirical study of digital reading pedagogy was conducted in two middle class outer suburban schools in the Queensland capital, Brisbane--two classes in each school provided study sites: two Year 2 classes; one Year 1/2 composite class; and a Year 1 class. Until recently, digital literacies have been generally resisted, dismissed, or overlooked by early childhood teachers in early reading agendas. There is now considerable pressure on Australian teachers, however, to plan within a multiliteracies framework and to include digital texts into their classroom programs. In Queensland, for example, "New Basics" reforms of public education hold teachers accountable in this regard, especially as the tasks relating to new basics include multiple text forms and modes of delivery. In this context, it is concerning that recent Australian research has found a surprisingly low level of understanding of digital literacies, and confidence in teaching these, on the part of both practicing teachers and new graduates. The aim of this paper is to inform professional development in this field by describing and explaining the digital reading pedagogies that some teachers are creating. Includes a table. (Contains 30 references.) (Author/NKA)

Reproductions supplied by EDRS are the best that can be made
from the original document.

http://www.aare.edu.au/02pap/doo02126.htm

ED 473 959

# Digital Reading Pedagogy for Novice Readers.

By Annah Healy and Karen Dooley

Paper presented at the AARE Conference, Brisbane December 2-5, 2002

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

A. Healy
K. Dooley

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CS 511 878



BEST COPY AVAILABLE

http://www.aare.edu.au/02pap/doo02126.htm

# Digital reading pedagogy for novice readers

**Annah Healy and Karen Dooley**

*Queensland University of Technology*

*In this paper we report on a study of pedagogic practices surrounding novice readers of digital texts in four early childhood classrooms in Queensland, Australia. Until recently, digital literacies have been generally resisted, dismissed or overlooked by early childhood teachers in early reading agendas. However, there is now considerable pressure on Australian teachers to plan within a multiliteracies framework and to include digital texts into their classroom programs. In Queensland, for example, 'New Basics' reforms of public education hold teachers accountable in this regard, especially as the tasks relating to new basics include multiple text forms and modes of delivery. In this context, it is concerning that recent Australian research has found a surprisingly low level of understanding of digital literacies, and confidence in teaching these, on the part of both practising teachers and new graduates. The aim of this paper is to inform professional development in this field by describing and explaining the digital reading pedagogies that some teachers are creating.*

## Introduction

In this paper we report on a small-scale study of pedagogic practices with novice readers of digital texts in four early childhood classrooms in Queensland, Australia. In a context of new literacies in which digital texts are increasingly assuming centrality, education authorities call for literacy experiences for primary students that reflect those in community practices (e.g., Luke, Freebody, Land & Booth, 2000). As a result, schools are beginning to create new versions of literacy education. It is not that print has become unimportant or the book redundant. However, the privileged status of traditional school literacies has diminished. Communication today is as much through multimedia as it is through the single medium of print. Consequently, children now form their early literacy practices in textual environments that are considerably more complex than those of their predecessors. As a result, language and literacy educators are increasingly expected to teach 'multiliteracies', that is, to base classroom literacy practice on texts from a range of technologies, involving different media and recognising diverse contexts and social purposes of communication.

The New Basics curriculum renewal project in Queensland public schools has linked multiliteracies to a normative social vision of a more equitable future (Education Queensland, 2002). The centrality of digital literacies to this vision reflects a belief, widespread amongst Australian researchers, policymakers and teachers, that some children will have constrained life chances if school literacy pedagogy does not make socially valued literacy practices available to all. Invoking sociological explanations developed variously by Bernstein and Bourdieu and others (Ladwig, 2000), various theorists additionally point to the disadvantaging effects of school literacy pedagogy that fails to build on the digital reading practices that are brought to school from family and community contexts (Bigum & Lankshear, 1997; Carrington, 2001; Comber, Badger, Barnett, Nixon, Prince & Pitt, 2001; Diaz, Arthur, Beecher & McNaught, 2000; Healy, 1999).

**The problem**

Recent Australian research has found a surprisingly low level of understanding of digital literacies, and confidence in teaching these, on the part of both practising teachers and new graduates. This is especially true within the early childhood sector where almost exclusive print storybook reading practices have been long enshrined and endorsed as the orthodox model for producing literate people (Diaz et al., 2000; Graduate Careers Council of Australia, 1996-99; Hammond & Macken-Horarik, 2000; Makin & McNaught, 2001; Moulton, 2001). In this context, a critical question arises: *What are the implications of incorporating new literacy texts into pedagogic practices that aim to prepare students for literate futures?* Of particular interest is the possibility that new relationships between texts, students and teachers emerge on at least two counts: [i] the computer interface permits interactivity with multimedia texts different from normative activity existing between an adult reader, a book and children; and [ii] dissolution of traditional generic boundaries that have defined the texts considered most suitable for teaching children to read.

An extensive literature indicates that parents, teachers and other adept readers have traditionally played an enabling role in children's acquisition of traditional print reading practices. Traditional text-student-teacher relations concern the teacher as 'expert', initiating children into literacy within a 'copyist novice' model. Much of this pedagogic work has been enacted through talk around books, prompting early childhood educators to model classroom reading instruction on the parent-child interactions of certain forms of middle class bedtime story routines (Williams, 1999).

Multimedia texts differ from traditional print picture books in that their amoebaean forms cannot be read (or taught) through the regularity of left-to right and top-to-bottom print orthodoxies. Their info-graphic nature is such that narrative/information structures are delivered through integrated compositions of image, sign, audio and written verbal codes that are designed for the reader to select and transform to meaning according to the reader's own grammatical design (Healy, 2000; Kress, 1997). However, it is not only the reading of these texts that differ, but also the way in which it is possible for the novice reader to be supported during reading. There is evidence that interactive texts, with their manipulative control devices, prompts and iconic reward features, multimedia artistry and interactive facilities, are able to support novices in the acquisition of meaning-making practices (Healy, 2000). Such conditions for reading mean that pedagogy must acknowledge the new support provisions, and the ways in which meaning is made from multimedia texts designed differently from books.

In investigating digital reading pedagogies, it is therefore necessary to describe and explain the ways that digital texts and human others enable novices to read in early childhood classrooms. In this context, the aim of this paper is to present analyses of pedagogic interactions amongst novice readers, digital texts and enabling others (e.g., teacher, peers) in early childhood classrooms. We shall begin by elucidating useful sociocultural understandings of the highly contested concepts of 'reading' and 'technology' that have been developed by new literacies theorists. Following that, we will introduce terms for describing pedagogic interactions in digital textual contexts, drawing on new textual theories and transformative reading theory (Healy, 1999; Kress, 1997) and Bernsteinian sociology of pedagogy (Bernstein, 2000; Dooley, 2001; Martin, 1999). In the main section of the paper we will present illustrative analyses of data produced during reading instruction in early childhood classrooms.



BEST COPY AVAILABLE

The significance of the paper arises from the framework it makes available for analysing pedagogic interactions in digital contexts. Teacher-student interaction has long been invoked to explain the systematic production of literacy failure through schooling. Attention has been drawn to the disadvantaging effects of both mismatches between home and school literacy practices, and inappropriate use of implicit or progressive forms of pedagogic interaction (Martin, 1999). The former, it was noted earlier, has informed discussions of digital literacies (Bigum & Lankshear, 1997; Carrington, 2001; Comber et al., 2001; Diaz, et al., 2000; Healy, 1999); and the latter, explicit teaching of socially powerful genres in Australian schools (Martin, 1999). Given the equity agenda of multiliteracies reforms in Queensland, research into the forms of pedagogic interaction created in digital pedagogic contexts is thus of considerable urgency.

**Sociocultural understandings of digital reading**

Traditionally, literacy was defined as sets of perceptual and cognitive skills for encoding and decoding print. An individual either had these skills or not; and was thereby considered literate or illiterate. Literacy itself was considered to be morally neutral, although it could be used for purposes good or bad. In contrast, contemporary sociocultural theorists define literacy as social practice. For these theorists, literacy is understood as actions (involving texts) through which specific practical purposes are achieved in particular contexts. Literacy is thus not morally neutral, but always implicated in struggles of power; always bound up with values, goals, interests and so forth (Bigum & Lankshear, 1997). From this perspective, reading has been described as a family of practices for cracking textual codes (e.g., sound-symbol relationships), making meaning (i.e., comprehending), using texts (e.g., gaining pleasure from a novel or information from a timetable), and analysing how texts work (e.g., to position readers in particular relations of power) (Luke & Freebody, 1997).

Amongst literacy researchers and policymakers there is broad agreement that new literacies - new families of reading practices included - have emerged as a consequence of the digital revolution in communication and information technologies (Bigum & Lankshear, 1997; Carrington, 2001; Comber et al., 2001; Diaz et al., 2000; Healy, 1999; Krausz, 2000). The assumption here is not that literacy has *become* technological, but that there is a shift from print to digital technologies, and with this, the emergence of new families of literate practice. Specifically, it is assumed that literacy arises out of a relationship between language and technologies available for representing language as marks on surfaces. Literacy is thus a material practice that must always be understood with reference to the relevant technology, be that a slate and slate pencil (as was the case in Queensland schools during our lifetimes), a VDU screen, mouse and keyboard, or any of a myriad of other writing tools and surfaces. In short, literate practices are always already technological. On the basis of this assumption theorists of digital literacies argue that the revolution in communication and information technologies has created new types of textual surface and hence, new literacies (Bigum & Lankshear, 1997; Durrant & Green, 2000). For our research a salient conclusion is that the textual artefacts and accompaniments of digital technology make a difference to the ways in which text is read (Healy, 1999).

Traditional print texts are generally composed of verbal codes (i.e., print) and some graphic codes (e.g., illustrations, diagrams). In contrast, digital texts are significantly more multimodal, often including audio codes (e.g., sound effects) and a substantially expanded range of graphic codes (e.g., animation). Furthermore, digital texts are not

necessarily fixed and linear like traditional print texts, but may be hypertextual, with links to one or many other sets of textons (script available via the connecting devices within computer technology) that relate directly or indirectly to main-frame text. To find a meaningful pathway through hypertext, cracking graphic, verbal and audio codes, and creating an integrated composition of meaning from diverse sources of information, a reader needs to use reading processes that are not applicable to traditional print texts (Healy, 1999). These include processes for navigating and transforming textual information, rather than predicting and interpreting it, as is the case with traditional print (Kress, 1997). In short, marks on digital surfaces cannot always be read in the same way as marks on the surfaces of traditional print texts. New reading practices, specific to the multimodality and hypertextuality of digital texts, have emerged.

Additionally, as suggested above, it has been hypothesised that the materiality of digital surfaces (i.e., the hypertextuality and multimodality of these texts) makes it possible for the text to enact some of the transmitting work traditionally undertaken by adept readers in pedagogic contexts. This is consistent with what has been described as the most radical proposition of actor network theory (Morgan, Russell & Ryan 2002), namely that objects need to be accorded agency akin to that of humans in social interaction. This assumption is widely accepted in the digital literacies field (e.g., Morgan, Russell & Ryan 2002).

Non-human transmitters (e.g., digital texts) can be accommodated by the Bernsteinian definition of pedagogy: interaction counts as 'pedagogic' when "there is a purposeful intention to initiate, modify, develop or change knowledge, conduct or practice by someone or something which already possesses or has access to, the necessary resources and the means of evaluating the acquisition" (Bernstein & Solomon, 1999: 267). The salient point for our research is that the transmitting position in a pedagogic relation may be taken up by some*thing* (e.g., a digital text), rather than, or in addition to, some*one* (e.g., an enabling adult).

**The study**

Our empirical study of digital reading pedagogy was conducted in two middle class outer suburban schools in the Queensland capital, Brisbane. Two classes in each school provided study sites: two Year 2 classes; one Year 1/2 composite class; and a Year 1 class. The schools were selected for the study because they were undertaking curriculum renewal projects in the area of literacy; and the classes, because of their regular engagement in digital literacy activities, and the willingness of the teachers to participate. Data were produced by interview with the teachers of the four participating classes, and intensive 45-60 minute observations of one student (or a pair or other small working groups) from each class during digital literacy activities.

Data production instruments developed by Healy (1999) for a study of young children's digital reading practices were refined for the purposes of the study. The interviews probed teachers' beliefs about print and digital reading pedagogy, and the strategies used to support students' acquisition of reading practices. The observations focused on human and non-human aspects of the pedagogic context within which digital reading occurred in the study classrooms.

The observation protocol was organised according to the following headings:

- Physical/environmental conditions (e.g., computer laboratory, classroom)
- Organisation factors (human participants, computers)
- Grouping of students (size of groups, principle for selecting groups)
- Text-type reading purpose (intended outcome of task)
- Task relationship to reading process (how reading related to the task)
- Apparent motivation factors (evident in classroom talk)
- Instruction factors (explicit instructions provided for students)
- Reading relationship with other curriculum content (integration orf curriculum)
- Reading task (transformative, mode switch, instructional)
- Monitoring factors (by teacher or other students)
- Time-on-task factors
- Student expectation of reading task (goal orientation)
- Other

Verbal behaviour checklist employed during observation

*Student*

- Initiates reading
- Asks questions
- Gives imperative commands (from reading)
- Responds to reading (verbally) to others
- Negotiates with other/s
- Interprets from reading for other/s (i.e., a teacher compared with another student, a male compared with a female, a close friend compared with other classmate)
- Interprets text meaningfully
- Follows screen cueing symbols
- Plays/trials
- Thinks aloud/used talk to monitor reading activity
- Requests human help
- Seeks computer-aided help
- Shares reading
- Fails to read aloud
- Guesses
- Language indicates image only references
- Uses range of voice tones for different subject matters/audience
- Uses text information to go forward
- Monitors activity with talk
- Able to describe reading process
- Able to describe reading content
- Demonstrates undisciplined reading (random)
- Demonstrates disciplined reading (sequenced)

It is the observational data that are analysed in this paper, and in relation to the pre and post-observation teacher interview responses. Observations were made in the course of regular literacy lessons. During observations, a researcher sat near the case study student(s), recording data on an observation protocol sheet, and asking clarifying questions of the student(s) as necessary (e.g., *How did you know how to X*?). Clarifying questions were also asked of the teachers (e.g., *How does the children's use of this software relate to the other activities you are currently doing in literacy lessons*?).

To describe and explicate the enabling work of teachers (peers, teacher aides and so forth) and digital text in pedagogy for novice readers, it is useful to consider who (or what) controls a given instance of pedagogic interaction. This is a concern regarding who (or what) selects the practices to be transmitted/acquired (i.e., codebreaking, meaning making, text use and text analysis); sequences and paces instruction in these practices; and establishes criteria for evaluating what counts as successful acquisition (Bernstein, 2000).

The concept of framing (F) has been developed to specify the locus of control in transmitter or acquirer. Strong framing (+F) indicates overt transmitter control; and weak framing (-F), apparent acquirer control. The coding rules by which framing values were ascribed to our data in accord with Bernsteinian principles of validity (Bernstein, 2000; Dooley, 2001) are presented in Table 1. These rules were produced by modifying analytic frameworks created for studies of sequences of literacy lessons (Martin, 1999) and of the activities that constitute individual lessons (Dooley, 2001). Specifically, descriptions of reader-text relations provided by new textual theories and transformative reading theories (Healy, 2000; Kress, 1997) were integrated into existing sets of rules for coding framing values. In the next section of this paper we apply these modified rules to our observation data set.

| | | |
|---|---|---|
| ++F | Very strong framing | telling, informing, explaining, calling attention to, directing, referring to |
| +F | Strong framing | guiding, leading to discovery, intervening in acquirer's practices, accompanying, providing *specifically digital:* design options for selection, rewarding right selection, auto-correct |
| -F | Weak framing | prompt, advise, encourage, consult<br><br>*specifically digital:* grammar and spell checking |

**Table 1:** Framing values, digital literacy pedagogy

(Daniels, 1988; Dooley, 2001; Morais, Neves & Fontinhas, 1999; Pedro, 1981; Singh, Dooley & Freebody, 2001)

**The classroom data**

Our classroom observations yielded data about the following reading tasks:

- Reading to compose a Power-point (PP) slide (Year 2)
- Reading to respond to science questions on the topic of spiders (http://www.enchantedlearning.com/Sisfor.shtml

  *LittleExplorers.com website)* (Year 2)

- Reading to play computer games drilling basic mathematics and language

In this paper we provide a detailed analysis of the PP lesson. Composing a PP slide is an exemplar of the lifelike literacy experiences Queensland state school teachers are now expected to create for primary school students. PP presentation is of considerable importance in the contemporary textual environment; it is arguably, a genre of power. Including PP in the literacy curriculum potentially makes a socially valued literacy practice available to students. Given the implication of teacher-student interaction in the production of literacy failure, it is necessary to investigate how this potential is pursued through pedagogic interaction.

**Reading to compose in Power-point**

A pair of Year 2 students, Rebecca and Elissa (pseudonyms), was observed reading while composing a PP slide for presentation to parents during the culminating activity of a term-length unit on 'Beatles and Insects'. Each presentation was planned as a three-slide sequence:

- **Slide 1** - Title and names of authors (accompanied by a digital photograph of authors/bug)
- **Slide 2** - A graphic image representation of the bug with labels, captions and sound
- **Slide 3** - Four interesting/important facts (in dot-point format)

During the term the students had been engaged in both print and computer-based literacy experiences. They had learned to make notes in their science diaries according to a weekly focus. For example, in one of the weeks the students had been asked to find ten interesting facts about their bug and to record the details. Another week's activity was focused on recording the life-cycle of their chosen insect/beetle graphically and verbally. The students had taken digital photographs and drawn from life specimens that had been collected from various sources at the beginning of the project. They had done scale measurements of each of the selected insects/beetles and compared and ordered them from smallest to largest, and with and without wing-span measurements. The students had constructed lists of the foods and eating patterns of each bug. They had also desk-top published an invitation to each of their parents and carers for the presentation afternoon.

The first half of the school term involved information searches and activities across both print and digital texts. In the last five weeks of the project, each pair of children spent an hour a week in the computer laboratory. They were expected to compose one slide per session, with the last week given to editing and final selections of sound, colour and information. To complete their slide, the Year 2 students were expected to read:

- Print diaries of information on insects collected during the term (purpose: selecting content for the slide)
- The Power-point program (purpose: to use the program)
- Power-point slide (purpose: composing, editing and proofreading)

The diaries were to be decoded, comprehended and used as sources of content for the slides. PP icons, menus and instructions were to be decoded, comprehended and used to make a slide. The slide was to be read for accuracy of encoding (proofreading) and clarity of cues to meaning (editing).

We found a substantial difference between print and digital pedagogy in this project. Specifically, the teacher had modelled and guided the note making and invitation genres with expectations of regularly formatted text, carefully controlled design and language features aimed to match those of the exemplars used as models. Thus, modelling is, at the least, strongly framed: the teacher is the transmitter and control is strong. However, there were different expectations of the PP presentation. PP was not modelled because the teacher believed that the PP program is capable of assisting children to problem-solve and to make design and language choices for themselves. Clearly, PP was being allocated a transmitting role. Given that the pairs of children had their Year 6 'buddies' to monitor the slide production sessions, the prompts and option menu icons are clearly seen as sufficient and explicit for scaffolding the students' learning and textual compositions. In direct contrast to the children's print texts, the design factors relating to PP texts, including composition, are considered to be as important as the informative aspects of the text. Indeed this interpretation is confirmed by the pre-observation interview, when the teacher provided explicit evidence that in print genres, the organisation of verbal language within the generic textual structure is the real focus, and the print technology design irrelevant.

In the slide composition we observed, the transmitting work was not enacted exclusively by PP, but was split between that program, the teacher and Year 6 buddies. Our observation was conducted during the composition of the fourth slide. The lesson began in the Year 2 classroom when the Year 2 teacher prepared students for the composition task. The students then went to a computer laboratory adjoining the Year 6 classroom to carry out the task. The laboratory housed 15 computers with child-sized furniture, and had good light. The Year 2 students were ability grouped in nine pairs that were described by their teacher as "roughly developmentally equal". Each pair worked at a computer. Five specially trained Year 6 students provided assistance. The Year 2 teacher did not enter the computer laboratory: the Year 6 teacher supervised through the large windows between the laboratory and her classroom.

It is productive to examine the lesson in more detail. The main activity of the lesson was Seatwork. This ubiquitous classroom activity opens with a preparatory oral stage during which the task is set and closes with a stage of independent student work on the task (Lemke, 1983, 1990). In our observation the preparatory stage occurred in the Year 2 classroom; and the independent stage, in the computer laboratory. The interactants in these two stages differed, as did the framing.

During the preparatory stage the transmitting position in the pedagogic relation was assumed by the Year 2 teacher; and the acquiring position, by the Year 2 students. This stage of the lesson was very strongly framed. The Year 2 teacher established procedures for the independent stage in the computer laboratory: the students were given directions for composing their slide. Evaluative criteria for their reading were strongly framed. Students were directed to read for "the four best points" about the insect in their diaries and to "make certain" of correct spelling and sense (i.e. to read to proofread and edit their slides).

The independent stage of the Seatwork activity occurred in the computer laboratory. In this stage transmitting work was split between Year 6 buddies and the PP program. The framing of this stage was complex.

The Year 2 students had brought their natural science notebooks with them to the computer laboratory, and the disk on which they had been writing their PP presentation. As was stated above, they knew that they were required to select only four points for their information slide, and had to select from, in some cases, three or four pages of possible facts. Some pairs had pre-decided and highlighted the text they were to put on the slide. Each pair has brought a simple editing checklist with them:

| |
|---|
| Have you checked your **spelling**? |
| Have you said **something** about the **topic**? |
| Have you chosen the **very best words** to describe your topic? |
| Have you said **something different** each time? |

The framing of the reading tasks of the independent phase was weak in that the students were free to select and sequence the reading tasks, and further, to pace them (within the parameters of the timetabled literacy period). In taking up this freedom, Rebecca and Elissa read little from their diaries (consulting them only to check the spelling of labelling words and descriptions). The pair read PP icons, menus and instructions only as needed to make a slide, and read their own slide repeatedly.

The weak framing of the reading tasks of the independent phase was realised through the interactions of the Year 2 students with the Year 6 students and PP. The Year 6 support students had been trained to act as *buddies* or consultants for the Year 2 students. Specifically, they provided encouragement and did not intervene in the Year 2 students' work, although they responded to the younger students' questions. The form of interaction here was Student Questioning Dialogue (Lemke, 1983, 1990) initiated by the Year 2 students to seek assistance with their project. The initiative of the Year 2 students makes this a weakly framed activity. This weak framing was reinforced by the facilitative (rather than directive) responses the Year 6 students had been trained to provide. There was no occasion where a buddy was observed doing the work for their younger partners. Instead, they adopted *a hands behind the back* position (i.e., kept their hands away from the mouse and keyboard), and prompted only with questions. Exemplar questions are as follows:

- *Where could you go to find out how to change your background colour?*
- *Have you read the menu?*
- *Is this how you want your insect to look?*
- *What else could you do?*
- *Experiment with how many ways you can you bring in text to attach labels to your insect parts?*

In addition to the Year 6 buddies, the PP program assumed a transmitting role during the composition phase. In the course of composing their slide, Rebecca and Elissa weighed up the pros and cons of different dot-point indicators. They trialled the traditional ones and several they downloaded from the *symbols* options. They also debated the use of capital and lowercase letters, after the PP program automatically changed the first letter of one of their dot-points to upper case - a moment of strong framing by the program. After this feedback, Rebecca and Elissa consulted a Year 6 buddy. The buddy checked whether or not they wanted to include a stem before their four points, and typed in an example for them to consider: *Four interesting things about frogs are:*.

Together the pair and their buddy then worked through reading the stem prior to each point to see if it 'reads properly' - a weakly framed activity in that the transmitter and acquirer were (apparently) discovering together. As a consequence, Rebecca and Elissa realised that some of their notes had to be adjusted to make sense, and while liking the idea of using a stem, decided to use only the single word *Frogs* to begin their points. The framing remained weak for the remainder of the independent phase as the Year 2 students explored design issues. The students queried the background colour that should be used for their information, just as they queried the sounds that best represented their bug, and the fonts that were appropriate for different types of information.

**Conclusion**

Our aim in this paper was to provide information to address the current paucity of research on teacher relations with children during literacy education in the first years of schooling. Thus, the focus has centred on the changes occurring to text-student-teacher relations in early literacy agendas. This has required us to go beyond the predominantly cognitive studies of print-based reading and writing to point out teacher roles and some of the dual affective-cognitive connections between the computer as a social space, and the reader-writer within that space. One of the key relational aspects concerns the differentials between the centrality of modelling and mirrored text production in print contexts, and the flexibility of text design and production in digital contexts. A key pedagogical issue has concerned the physical control children exhibit over the computer-space and its connections to (and prerequisite for) the control required to read and write texts generally. Although the two control types have different potentials they do not appear to serve different functions.

We have provided a detailed analysis of teacher-student-digital text interaction in a classroom where the socially valued literacy practice of PP presentation was made available. Using a framework that integrated concepts from Bernsteinian sociology of pedagogy with concepts from new textual and transformative reading theories, we have shown that the evaluative criteria of the digital literacy lesson were strongly framed by the teacher as transmitter. In contrast, the selection, sequencing and pacing of instruction were generally weakly framed by Year 6 buddies and PP (with the exception of the strong framing provided by the auto-correct function). In other words, while evaluative criteria were strongly controlled in the digital pedagogy, other components of instruction were not. This is a useful platform for further research that urgently needs to address a plethora of equity issues concerning the incorporation of digital texts at the core of literacy curricula in Australian schools.

[This study was funded by a Faculty Internal Research Grant (2002) awarded by the Faculty of Education, Queensland University of Technology.]

**References**


Bernstein, B. (2000). *Pedagogy, symbolic control and identity: Theory, research, critique* (rev. ed.). Lanham, MD: Rowman & Littlefield Publishers.

Bernstein, B. & Solomon, J. (1999). Pedagogy, identity and the construction of a theory of symbolic control: Basil Bernstein questioned by Joseph Solomon. *British Journal of Sociology of Education, 20,* 2, 265-279.

Bigum, C. & Lankshear, C. (1997). *Digital Rhetorics: Literacies and Technologies in Education.* Brisbane: Queensland University of Technology Press.

Carrington, V. (2001). Emergent home literacies: A challenge for educators. *Australian Journal of Language and Literacy, 24,* 2, 88-100.

Comber, B., Badger, L., Barnett, J., Nixon, H. and Pitt, J. (2001). *Socio-economically disadvantaged students and the development of literacies in school: A longitudinal study.* University of South Australia/Department of Education, Training and Employment, South Australia.

Daniels, H. (1988). An enquiry into different forms of special school organisation: pedagogic practice and pupil discrimination. *Collected Original Reports in Education, 12,* 2.

Dooley, K. (2001). Adapting to diversity: Pedagogy for Taiwanese students in mainstream Australian secondary school classes. Unpublished PhD thesis. Griffith University.

Diaz, C.J., Arthur, L., Beecher, B. & McNaught, M. (2000). Multiple literacies in early childhood: What do families and communities think about their children's early literacy learning? *Australian Journal of Language and Literacy, 23,* 3, 230-44.

Durrant, C. & Green, B. (2000). Literacy and the new technologies in school education: Meeting the L(IT)eracy challenge. *Australian Journal of Language and Literacy, 23,* 2, 89-108.

Education Queensland (2000). *New Basics Project Technical Paper* (Version 3: 3 April 2000).

Avaliable: http://education.qld.gov.au/corporate/newbasics/docs/nbftech.doc

Graduate Careers Council of Australia (1996, 97, 98, 99). *Graduate Destination, Course Experience Questionnaire and Comments*: Careers and Employment Service.

Hammond, J. & Macken-Horarik, M. (2000). Teacher's voices, teacher's practices: Insider perspectives on literacy education, *Australian Journal of Language and Literacy, 24,* 2, 112-32.

Healy, A. (1999). *Children reading in a post-typographic age.* Unpublished PhD thesis. Queensland University of Technology.

Healy, A. (2000) *Teaching reading and writing in a multiliteracies context: Classroom Practice.* Flaxton: Post Pressed.

Krausz, P. (2000). Children and the new media literacy. *Practically Primary, 5,* 2, 21-23.

Kress, G. (1997). *Multimodal texts and Critical Discourse Analysis.* Institute of Education: University of London.

Ladwig, J.G. (2000). World institutions, world dispositions: Curriculum in the world-cultural institutions of schooling. In R. Mahalingam & C. McCarthy (Eds.), *Multicultural curriculum: New directions for social theory, practice and policy* (pp. 56-69). New York: Routledge.

Lemke J.L. (1983). *Classroom communication of science.* Final report. City University of New York, Brooklyn, New York. ERIC Document ED222 346.

Lemke, J.L. (1990). *Talking science: Language, learning and values.* Norwood, NJ: Ablex Publishing Company.

Luke, A. & Freebody, P. (1997). Reading and colonization. In S.Muspratt, A. Luke & P.Freebody (Eds.), *Shaping the social practices of reading.* (pp. 185-225). Sydney: Allen & Unwin.

Luke, A., Freebody, P., Land, R. & Booth, S. (2000). *Literate futures: Report of the Literacy Review for Queensland State Schools.* Brisbane: Queensland Government, Queensland Education.

Mackin, L. & McNaught, M. (2001). Multiple perspectives on early literacy: Staff and parents speak out. *Australian Journal of Language and Literacy, 24,* 2, 133-44.

Martin, J.R. (1999). Mentoring semogenesis: 'genre-based' literacy pedagogy, in F.Christie (Ed.), *Pedagogy and the shaping of consciousness: Linguistic and social processes* (pp 123-155). Cambridge: Cassell.

Morais, A., Neves, I.P. & Fontinhas, F. (1999) Is there any change in science educational reforms? A sociological study of theories of instruction. *British Journal of Sociology of Education, 21,* 1, 37-53.

Morgan, W. Russell, A. & Ryan, M. (2002). Informed opportunism: Teaching for learning in uncertain contexts of distributed education. In M.R. Lea & K. Nicoll (Eds.), *Distributed learning: social and cultural approaches to practice* (pp. 38-55). London: Routledge.

Moulton, K. (2001). Exploring literacy in the transition: Preschool to Prep. In C. Davidson & A. Williams (Eds.), *Learning from each other: Literacy, labels and limitations. Vol 2* (pp. 13-28). Victoria, Australia: Language Australia Ltd.

Pedro, E.R. (1981). *Social stratification and classroom discourse: A sociolinguistic analysis of classroom practice*. Lund: Liber Laromedal.

Singh, P., Dooley, K. & Freebody, P. (2001). Literacy pedagogies that may 'make a difference'. *Asia Pacific Journal of Teacher Education, 29,* 1, 49-71.

Williams, G. (1999). The pedagogic device and the production of pedagogic discourse: a case example in early literacy education. In F.Christie (Ed.), *Pedagogy and the shaping of consciousness: Linguistic and social processes* (pp 88-122). Cambridge: Cassell.

CS 511 878

**U.S. Department of Education**
**Office of Educational Research and Improvement (OERI)**
**National Library of Education (NLE)**
**Educational Resources Information Center (ERIC)**
**Reproduction Release (Specific Document)**

## I. DOCUMENT IDENTIFICATION:

| | |
|---|---|
| Title: Digital Reading Pedagogy for noviuce readers | |
| Author(s): Dr Annah Healy & Dr Karen Dooley | |
| Corporate Source: Faculty of Education, Queensland University of Technology (Australia) | Publication Date: November, 2002 |

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Documer Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, on of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following thre options and sign in the indicated space following.

| The sample sticker shown below will be affixed to all Level 1 documents | The sample sticker shown below will be affixed to all Level 2A documents | The sample sticker shown below will be affixed to all Level 2B documents |
|---|---|---|
| PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY SAMPLE TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) | PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY SAMPLE TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) | PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY SAMPLE TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) |
| **Level 1** | **Level 2A** | **Level 2B** |
| ↑ ☐ | ↑ ☐ | ↑ ☐ |
| Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) *and* paper copy. | Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only | Check here for Level 2B release, permitting reproduction and dissemination in microfiche only |

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

*I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.*

| | | |
|---|---|---|
| Signature: A. Healy K.J. Dooley | Printed Name/Position/Title: Dr Annah Healy Dr Karen Dooley | |
| Organization/Address: School of Cultural and Language Studies in | Telephone: +61 7 3864 3449 | Fax: +61 7 3864 3988 |

Education,
Faculty of Education,
Queensland University of Technology
Victoria Park Road
Kelvin Grove
Queensland 4059
Australia

E-mail Address:
a.healy@qut.edu.au
k.dooley@qut.edu.au

Date: 7 March, 2003

## III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also b aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

## IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

## V. WHERE TO SEND THIS FORM:

Send this form to: ERIC Clearinghouse on Reading, English, and Communication (ERIC/REC).

**ERIC/REC Clearinghouse | 2805 E 10th St Suite 140 | Bloomington, IN 47408-2698**
**Telephone: 812-855-5847 | Toll Free: 800-759-4723 | FAX: 812-856-5512**
**e-mail: ericcs@indiana.edu | WWW: http://eric.indiana.edu**
EFF-088 (Rev. 9/97)

**| NEWS ABOUT READING | BOOKSTORE | LESSON PLANS | FAMILY INFO CENTER | ONLINE EDUCATION | WEB RESOURCES | SUBMISSIONS | DIGESTS & BIBLIOS | Q&A SERVICES | ERIC NATIONAL | DATABASE SEARCHES | WORKSHOPS | SLIDESHOW |**
**ERIC is a project of the U.S. Department of Education and the National Library of Education, with funding from the Institute of Education Sciences (IES).**
**ERIC/REC | Indiana University | Smith Research Center, Suite 140 | Bloomington, IN 47408-2698**
**(800) 759-4723 | (812) 855-5847 | FAX (812) 856-5512**
**System Administrator: Andy Wiseman | Database Administrator: Roger Sensenbaugh**